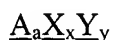


In the Claims

Claims 1 – 41 (Cancelled)

42. (Currently Amended) A process for treating and/or preventing fibroses comprising administering a therapeutically effective amount of the pharmaceutical composition which comprises at least one biocompatible polymer ~~according to Claim 1~~ of the following general formula (I):

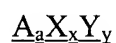


wherein:

- A represents a monomer,
- X represents a carboxyl group bonded to monomer A and is contained within a group according to the following formula: -R-COO-R', in which R is a bond or an aliphatic hydrocarbon chain, optionally branched and/or unsaturated, and which can contain one or more aromatic rings except for benzylamine and benzylamine sulfonate, and R' represents a hydrogen atom or a cation,
- Y represents a sulfate or sulfonate group bonded to monomer A and is contained within a group according to one of the following formulas: -R-O-SO₃-R', -R-N-SO₃-R', -R-SO₃-R', in which R is a bond or an aliphatic hydrocarbon chain, optionally branched and/or unsaturated, and which can contain one or more aromatic rings except for benzylamine and benzylamine sulfonate, and R' represents a hydrogen atom or a cation,
- a represents the number of monomers A such that the mass of said polymers of formula (I) is greater than approximately 5,000 da,
- x represents a substitution rate of the monomers A by the groups X, which is between approximately 20 and 150%, and

- y represents a substitution rate of the monomers A by the groups Y, which is between approximately 30 and 150%.

43. (Currently Amended) A process for regulation of proliferation of mesenchymal cells and regulation of the quality of the type of collagen that such cells secrete comprising administering a therapeutically effective amount of the pharmaceutical composition which comprises at least one biocompatible polymer ~~according to Claim 1~~ of the following general formula (I):



wherein:

- A represents a monomer,

- X represents a carboxyl group bonded to monomer A and is contained within a group according to the following formula: -R-COO-R', in which R is a bond or an aliphatic hydrocarbon chain, optionally branched and/or unsaturated, and which can contain one or more aromatic rings except for benzylamine and benzylamine sulfonate, and R' represents a hydrogen atom or a cation,

- Y represents a sulfate or sulfonate group bonded to monomer A and is contained within a group according to one of the following formulas: -R-O-SO₃-R', -R-N-SO₃-R', -R-SO₃-R', in which R is a bond or an aliphatic hydrocarbon chain, optionally branched and/or unsaturated, and which can contain one or more aromatic rings except for benzylamine and benzylamine sulfonate, and R' represents a hydrogen atom or a cation,

- a represents the number of monomers A such that the mass of said polymers of formula (I) is greater than approximately 5,000 da,

- x represents a substitution rate of the monomers A by the groups X, which is between approximately 20 and 150%, and

- y represents a substitution rate of the monomers A by the groups Y, which is between approximately 30 and 150%.

Claims 44 – 60 (Cancelled)

61. (New) The process according to Claim 42, wherein the fibroses are fibroses of smooth muscle tissue.

62. (New) The process according to Claim 42, wherein the fibroses are fibroses of mesenchymal tissue.